

# GD420SD

**SURFACE MOUNT, SCHOTTKY BARRIER DIODE  
VOLTAGE 40V, CURRENT 0.1A**

## Description

The GD420SD is designed for low power rectification.

## Package Dimensions

**SOD-323**

Marking :

Circuit:

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.85	1.05			
A1	0	0.10	L	0.20	0.40
A2	0.80	1.00	b	0.25	0.40
D	1.15	1.45	c	0.10	0.18
E	1.60	1.80			
HE	2.30	2.70	Q1	0.15 BSC.	

## Absolute Maximum Ratings at TA = 25°C

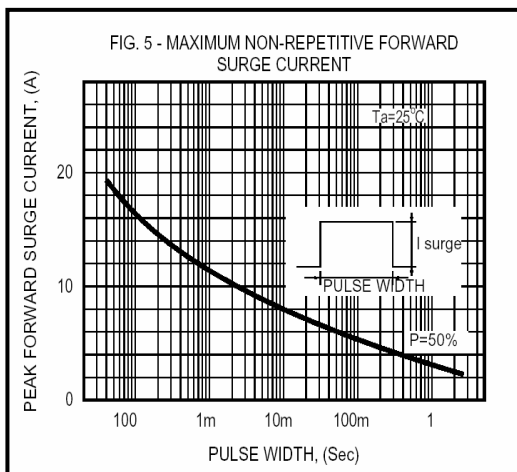
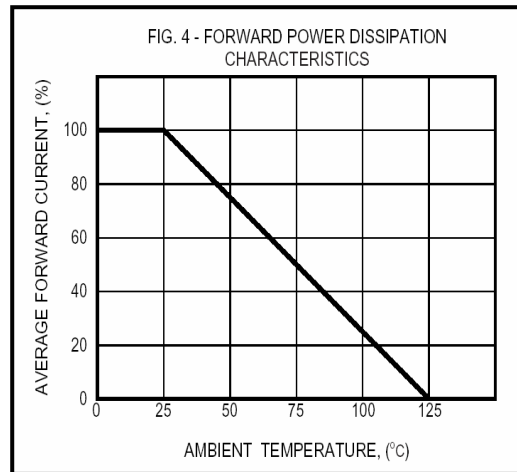
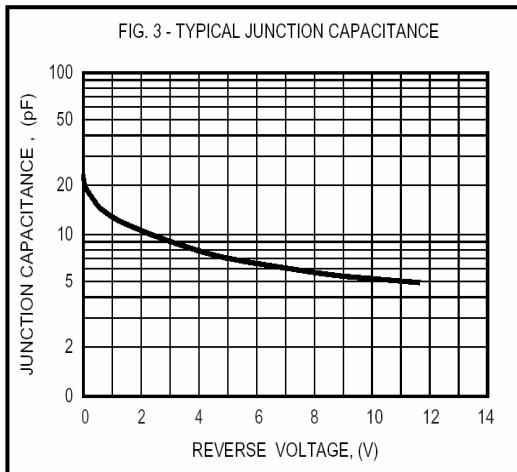
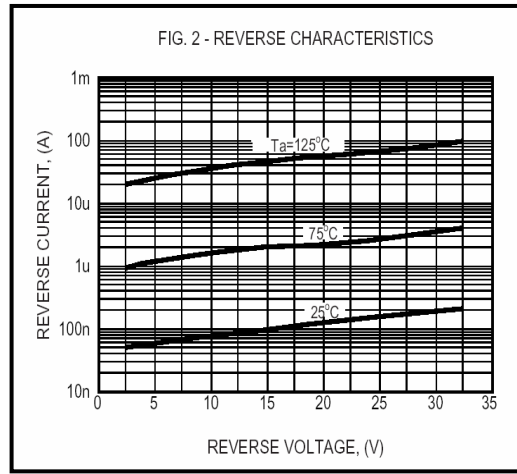
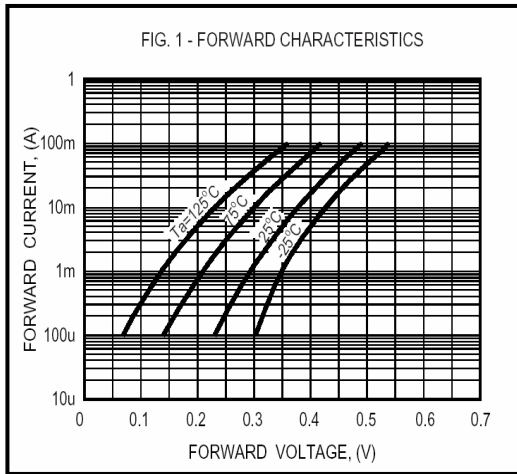
Parameter	Symbol	Ratings	Unit
Junction Temperature	T <sub>J</sub>	+125	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +125	°C
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	V
Peak Forward Surge Current at 8.3mSec single half sine-wave	I <sub>FSM</sub>	1.0	A
Typical Junction Capacitance between Terminal (Note 1)	C <sub>J</sub>	6.0	pF
Maximum Average Forward Rectified Current	I <sub>o</sub>	0.1	A
Total Power Dissipation	PD	225	mW

## Electrical Characteristics (at TA = 25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	40	-	-	V	I <sub>R</sub> =100μA
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	-	-	450	mV	I <sub>F</sub> =10mA
Maximum Average Reverse Current	I <sub>R</sub>	-	-	1.0	uA	V <sub>R</sub> =10V

- Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 10 volts.  
2. ESD sensitive product handling required.

## Characteristics Curve



**Important Notice:**

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

**Head Office And Factory:**

- Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
- TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
- TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165